

RESPONSE

With the entry of the amendments to the specification, and with the further amendment of some of the claims after incorporating the amendments previously submitted in the response of 2/11/05, it is believed that the application is in condition for careful consideration, and, we believe, allowance. The following response is to the formal rejection of 6/16/2005, in light of comments in the Advisory Action after Final of 9/7/05.

1. REJECTIONS UNDER 35 USC Sect 112

Claims 1-14 and 30 stand rejected under USC 112 for lack of basis in the specification, subsequent to the addition of "about" to certain ranges in these claims. In response to Examiner's rejection, the claims have all been amended so that the word "about", when referring to percentages, is present only in the range-defining phrase "about 10% to 30%" of PO, found in the specification at paragraph 0065 line 9 ("0065/9").

A variety of ranges and examples are found in the specification and in original claims 4, 5, 17, 18, 30, 38 and 39. The phrase "at least 10%, preferably 25%" is found in 0034/6. In 0047, it is stated that "adhesives of higher reliability will be non-absorbable and contain 10% to 30% PO." Some embodiments have a second polymer which can have a lower amount of PO, up to 10% (0065/11; 0066/8 - 12). Intermediate ranges are mentioned in the specification and original claims: 75%EO/ 25% PO, 0066/end; 80%:20%, examples 1-5; 5% PO in one and 25% PO in another, 0066/15-17. Because the 5%, 20 or 25%, and 75 or 80% values are preferred values in a range (at most 10%, about 10 to 30%; etc.), they inherently have latitude. The removal of the "about" in any of these situations is intended as a correction as to form, and not as a concession removing the equivalence of similar values.

It is therefore applicant's belief that there is support in the specification and original claims for a variety of ranges, including a range at least as broad as the "about 10% to 30%" range found in the specification and claims. It is believed that the present claims as amended are in compliance with the requirements of Sect. 112.

4. REJECTIONS UNDER 35 USC 102

Claims 1 - 3 and 8 remain rejected under 102b as anticipated by Muller et al, US 5,624,972. In Examiner's notes in the Advisory Action of 9/7/05, it is noted that the preamble has no weight, and so the claims as presented were purely a composition. It is also clear that since applicants and Muller et al used "hydrophilic" differently, a distinction based on hydrophilicity is unlikely to be found to be useful.

Two amendments have been made to the independent claims (1, 17, 40) to distinguish them over Muller. First, the limitation of the preamble has been incorporated into the body of the claims, so that all three independent claims now contain the limitation, "wherein the composition is suitable for use as a biocompatible tissue-bonding adhesive composition."

Second, the independent claims have been amended to contain an additional limitation, "characterized in that after polymerization, upon exposure to tissue or water, the adhesive forms a hydrogel comprising greater than 50% water by volume;" The basis in the specification is the second sentence of paragraph 0047: "Adhesives with greater than 30% PO will not form hydrogels comprising greater than 50% water by volume." This limitation captures the difference between the foams of commerce and our materials, and provides motivation for the limitation of percent PO in the composition. It helps explain why, after curing, Muller et al have open cell foams, while applicants have tissue-adherent hydrogels.

It is believed that subsequent to these amendments, the rejection of claims 1-3, 8, and others under Sect. 102 over Muller is obviated. Passage of at least claims 1-3, 8 and the independent claims 17 and 40 to issue is respectfully requested.

5. REJECTIONS UNDER 35 USC 103

The other dependent claims (4-7, 9-14, 18 - 30, and 41 - 49) are rejected as being obvious over Muller et al. Because the independent claims are believed to be allowable, the dependent claims are likewise allowable, and passage of the dependent claims to issue is respectfully requested.

It is believed that the pending claims as amended are now in condition for passage to issue. Because these materials are in preclinical testing, and clinical trials are beginning to be planned, applicants request a telephone or personal interview if there are any remaining questions concerning patentability, or other issues. Applicant's representative can be reached at the phone or e-mail address below, as well as by mail.

Sincerely,



Francis H Kirkpatrick

35,219

978-790-7186; fckirk@post.harvard.edu